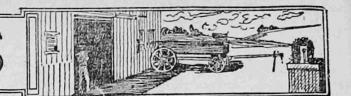


NEWS AND VIEWS OF FARMERS



BITTER AND ROPY MILK

The Source and Nature of the sprayed about three weeks after the Bacteria Which Make These Conditions Possible.

BY L. A. ROGEES, Varied States Bureau of Animal Industry.

The d'stinct bitter taste which sometimes appears in milk may be caused to the work. udder. (3) an advanced period of lacta- off now than cut them later.

It is probable that the bacteria causing bitterness are not at all uncommon least three times-six is better.

thus survive heating, which destroys dairy. the lactic acid bacteria. For this reathe lactic acid bacteria. For this reaIt is a mistake to let bee hives stand
son bitterness has been most frequentin the hot sun. Place them under a
dom drank water when fed prickly an inch block between each two wires

The few remaining spores germinate, if you do not fectly sterllized milk. and as they are unhindered by the bees will surprise you by swarming presence of lactic acid bacteria they when you are the busiest and you may oon reach unusual number and the lose them.

bitter flavor appears. Bitter milk may appear as an epi-demic, persisting day after day, and If you have no range for the poulcausing great trouble. This may be try you must give them green stuff all due to some constant localized source summer. Sharp grit, too—not sand. of infection which adds each day un-

In some cases it has been found that price enough better to pay for the loss the udder of a cow was infected. This of the old crates. should be determined by carefully If the cabbage root maggot is at cleaning the udders of all cows and work fit a piece of tarred paper close milking from each quarter of the udder about the base of the plants. It wil of each cow into fruit jars or bottles help. which have previously been cleaned Dust the climbing roses with sulphur

In case one of these samples shows on, to prevent mildew. should be injected into the udder after this month. each milking a solution of one part of hyposulphite of soda in 100 parts of

It is possible in many cases that the source of infection is not localized. If dominant.

ing everything coming in contact with hive. the milk, to introduce some good sour milk from a neighboring dairy.

able bacteria suppressed.

Ropy milk is, so far as known, in no way detrimental to health. The fa-mous Edam cheese is nearly all made from milk which has undergone this

fermentation. Most people, however, object seriously to milk with any tendency to form threads. This trouble frequently affects the milk of a dairy day after day and is removed only by the most

drastic measures this nature frequently occur in the cold months, because the bacteria of this group thrive better at low temperatures than the lactic-acid bacteria which hold them in check un-

der normal conditions. In one case it was found that these bacteria were abundant in the dust of the stable. The trouble was removed by thoroughly cleaning and white-

In another serious and persistent outbreak it was found that the milk as It came from the dairy contained few or no ropy milk bacteria, but they were abundant in the water tank in

which the milk was held overnight. The small amount of water occasionally splashed into the cans added sufficient bacteria to make the milk ropy in a comparatively short time, The utensils and floor had become

so thoroughly impregnated with this organism that milk exposed in the ent upon a particular kind of material strainer became ropy without contam-

FACTS WORTH KNOWING

The first English bushel measure was fixed at eight gallons of wheat during the reign of Henry VIII. The bushel now legal was regulated by parliament 1824 and is the same in the United

Butter is never used by the Greeks Romans or Chinese, oil being preferred. In Africa, at Kebba, vegetable butter is made from the fruit of the shea tree and is said to be of richer taste than butter made from cows' milk

When mourning for their dead the Israelites neither washed nor anointed themselves. Greeks and Romans fasted. In Europe they wear black, in China white, in Turkey violet and in Ethiopia

Washington's monument in Washington, D. C., is the highest structure of its kind in the world except the Eiffel tower in Paris. It cost \$1,200,000. It is a white obeliek 555 feet in height. the base is 55 feet square and the walls are 15 feet thick. It is built of crystal Maryland marble, lighted by electricity

Cattle were first brought to America by hand by Columbus on his second voyage.

A better way than to cultivate clean is to pasture such a field with cattle; is to pasture such a field with cattle;

ancients and put upon the third finger ground, kining the vitality of the left hand, from a supposed connection of a vein there with the heart.

Another way is to seed such a field bugs and grasshoppers, and are so centage of the apples dropped and I

Notice little white spots on the pear blossoms fall and twice more at intervals of about two weeks will pre-

The leaf-eating insects are busy in the orchard now. Give them paris

of the season. Go slow with the horse and take it easy yourself till hardened

It is a mistake to let bee hives stand

If you do not have a hive ready the

Better burn all the old berry crates

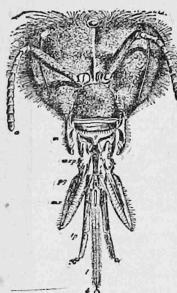
early in the morning, while the dew i

der of the cow. In that case there safe for winter. Clean up the ground

BEES ARE INTERESTING

The most important product obthrough some combination of circum- tained from bees is the honey. This stances the lactic acid bacteria are is scarcely different from the nectar as suppressed, other kinds become pre- secreted by flowers, the honey from different plants being so little changed The utensils, the milk room and the by the process of storage and curing with these bacteria or their spores and kind of plant retains its particular each new lot of milk is thoroughly in- color and flavor. In collecting and storing it the bees simply pump it into The bitter-milk bacteria may be one the honey sack and from this it is of the new forms. In this event it may forced back through the proboscis and be necessary, after thoroughly clean- deposited in the cells of comb in the

produced from glands and is used feed over eight gallons of water, which



Zoology, Ohio State University.

DORSET SHEEP



twin-lamb bearers and are a hardy

CATTLE KILL MORNING GLORIES

also an elevator which rises in seven practicable, as in the rush of the harvest there is no time to hoe the field

A better way than to cultivate clean fall to come at the call.

were first made of iron. Wedding in grass. This should be sown with a completely overshadowed by grass that found only two that were wormy. The 1855 hay. The next year's hay crop will be sure that they are shut up when contain very few morning glory vines, the grass is wet or the mowing machine ers as soon as they are ready. They Spraying the cows will discourage the third none provided the grasses about to be used. or bluegrass. The grasses kill the pest, much at frightening away hawks.

STOCK EAT PRICKLY PEARS

Results of Experiments Made at New Mexico Experiment Station Show This.

BY PROFESSOR B. F. HARE.

The increased use of the prickly pear (the flat-jointed members of the genus by (1) certain weeds that the cow has

Now the sprouts on the trees are opunita) as feed for all classes of rueaten, (2) an abnormal condition of the sprouting vigorously. Better rub them cattle, makes it important for the protion, or (4) the action of certain bacteria. Only the fourth cause of bitteria. Only the fourth cause of bitter milk will be discussed in this These will come up first and keep the trients to expect from feeding a given quantity of the plant either along or

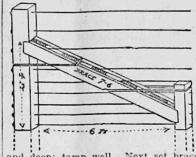
Experiments seem to show that when Now is a good time to give the poul- prickly pear is fed with cured fodders

stance of high protein content.

The steers experimented upon sel- the cut. observed in pasteurized and imper- sheltering tree or vine with a good cir- pear alone. In fact, in feeding a ra- between the braces.

THE BRACE THAT HOLDS

Material for the brace, if sawed stuff should be 2 by 6 inches; if poles are Government's Experiments for sed they should be heavy enough to



NEW USE FOR CORNSTALKS

Making Paper Out of These Likely to Be Valuable.

Professor B. T. Galloway of the Agricultural Department at Washington, who has been experimenting with cornstalks as a material for making paper, announces that great progress has been achieved along this line. While he does not say that the experiments so far prove that the thing is actually accomplished and is a compensative provided by the composition of the most fertile farms of the west. It is the man more than the location.

Ever know a man to scrub his hogs "Thave never tried clover," he writes, "That protect that I notice that I notice."

EDITORIAL DICTUM

Many claim that travel is apt to make a man discontented, but with me travel breeds contentment. A trip among fellow farmers in other se tions shows me how I may improve my own methods. The more I travel among successful farmers the morthoroughly I am convinced that it is Professor B. T. Galloway of the Ag- location. I have seen men on eastern more in the man than in the farm of

Ever know a man to scrub his hogs mercial success, he is very hopeful that it will work out satisfactorily.

The paper workers are greatly interested in the experiments because, if it turns out that this great product of declares if two lots of hogs are treated will little. the farm can be turned into good paper alike in every respect, except that one little sandy," because the growth of sour the milk; the more common forms, thrive in hot weather.

The nutritive ratio is very wide for braces, two of them; fasten a piece of inch board between at each end temporarily; nail the braces lightly to not entirely useless as stock food, millions of acres are allowed to go enforced the more common forms, thrive in hot weather.

The nutritive ratio is very wide for braces, two of them; fasten a piece of inch board between at each end temporarily; nail the braces lightly to not entirely useless as stock food, millions of acres are allowed to go enford them out of the house so as for some of the fence wire loss of areas, with a dry house, so as two of them; fasten a piece of inch board between at each end temporarily; nail the braces lightly to hold solid while wiring them to the hold solid while wiring the ford them comfort at night, will also is desired to grow a cash or market and wrap several times, as shown in tirely to waste every year.

the cut. After the fence is up put Paper-making wood is becoming promote thrift and growth. There may somewhat scarce, although there is no be something in that argument, such famine in the northern woods as if he tried. I do know that naturally bage, the rotation may be lengthened, and the crop will thus receive the benefits from the rotation and be hana hog is a pretty clean sort of animal and he enjoys a bath as much as man does. If the hog is considered filthy animal that devours filthy food t is because of the treatment given. Hogs will select clean and whole food always if given the opportunity

product is rapidly increasing.

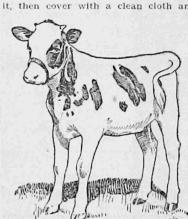
MAKE BUTTER FREE FROM STREAKS

which are so annoying to dairymen other hay, who sometimes experience this trouble, Clover t

cold, poured on the product through through the soil by leaching. strainer until the water runs quite lear of buttermilk.

the edge of the ladle.

Pour off whatever water runs from



First prize Holstein calf, owned by J.

A basin of cold water placed in an B. Iroem, Minneapolis, Minn. oven that is too hot when baking will bring down the temperature more becomes absorbed all through it. as dry as can be made, then

> In the latter case press the butter in solidly and pour over it a little which then pour off and sprinkle a little salt over it.

in hard water which is used in wash-ing the butter, or impurities in cheap

PERPETUATING A FOREST

In 1892 the first example of systewas begun at Biltmore, N. C. It is still in successful operation. In felling a tree



great care is exercised to prevent un necessary injury to young trees or in its fall the seedlings which the future of the forest depends.

ACQUIRING HONEY BEES

A farmer who always has a number of bee hives has been losing a number Michigan. you have no bees and want to thart in comes after the other fall work is at 200

ful of coarse salt on the spot

CLOVER ON SANDY LOAM

Especially Valuable as a Rotz tion Crop and Will Grow Nearly Everywhere.

BY C. M. MILLER.

but I notice that it grows in places along the roads in the vicinity of my

There can be no doubt that clover will do well on "good black loam, vagrant clover alongside proves that will the proper bacteria are present in the

Clover is a great crop for a rotation, and we suggest the following: Corn wheat and clover; or, when it crop, such as potatoes, beans and cabdled with the same labor and teams required to perform the general farm vork, thus decreasing the cost of production and eliminating the fertilizer

Clover sould be grown every third or fourth year; or, where this crop fails, some other legume should be The time is not far distant when utilized. Of all the plants with which people will place a higher estimate upon the value of skim milk as a human food. Many of our scientific men

have devoted much study and attention to this phase of the dairy busicause it sends its roots down deeper, It is superior to other grasses beness until they have solved the prob- thus feeding upon mineral and vegelem of preserving this liquid food in table substances in the soil that are a solid form, and already there are a out of reach of the surface feeding number of powdered milk plants in plants. It also increases the nitrogen operation and the demand for the and humus content of the soil and is an excellent food for all kinds of live

There is no forage crop, excepting alfalfa, that possesses as many valuible qualities as our common red To prevent the streaks in butter, clover, All ruminants prefer it to

Clover thrives on almost all forms the butter should be taken from the of soil and it is especially valuable churn when it is in the form of small on sandy soil, as it draws its nourishgrains not larger than buckwheat ker- ment from the subsoil and from the atmosphere and brings back to the The buttermilk should then be surface many soluble elements of fer-strained off and clear water, fresh and tility that have been washed down

Alfalfa ought to grow well on this ear of buttermilk.

Then put the butter in a bowl or other farmers have not succeeded with orker and spread it sufficiently thin it is no reason why our young friend so that fine pure salt may be sprinkled should not try it. Sow on high or roll-Turn in the edges and press the butter without drawing the ladle over it, but simply pressing it to get out the surplus water, and cut it in pieces with ing land, well drained, in a perfect particularly well adapted to western

GOOD MONEY IN BEANS

There is good profit in white field eans, and they are a pretty sure crop grow rank, or if the soil is loose and gravelly there will be difficulty in retaining sufficient moisture. A good loam corn land is the right soil. I use beans in a four-year rotation-two years clover, one year corn, followed

Plow after corn planting is done and make a good, fine seed bed. Planting occurs May 15 to July 1—perhaps the most being planted in the first half of June. I use from one-half to thre fourths of a bushel per acre. I drill in rows 28 inches apart,

Up to the time of blossoming the cultivation of beans is practically the same as for corn. It must be frequent to destroy the weeds and preserve the surface mulch, thereby conserving the a few hours the salt will dissolve, the moisture of the lower soil. The branch urplus brine drain off, and the salt roots are so far developed at the time of blossoming that further cultivation When this stage has been reached, will hurt rather than help the crop. It work it over by pressure only until it is a good plan to plant a part of the mold crop early and a part late, as cultivait into rolls or cakes, or pack it into tion and harvesting are better distributed and leaves days of scarcity of farm help. This is a valuable fea-

Fertilizing Is an important matter in raising beans. If the soil is too poor Exposure to light when the butter is it will not raise good beans and it set away to drain after salting is one will not do to apply barnyard manure cause of streaks in butter. Also lime directly to the crop. It pays better to salt are well-known agents in bleach- attention he will find it will give him as great returns for money and time nvested as anything he can raise,-E. L. Griffin, Michigan.

BUCKWHEAT AS A CATCH CROP

eed we plow the ground as soon after he harvest as possible and sow t tive crop, but I occasionally use it t urther my grass seeding plans. I hav never failed in getting a good catch o grass or clover, though sometime buckwheat fails in making a good crop. When weeds grow in the wheat stubble after harvest you may be sure tha he clover seed is gone. It takes only about sixty days for buckwheat to grow and ripen. It will usually yield 10 to 20 bushels per acre, so it vell for the labor involved and at the same time makes a fine shade and protection for young grass and clover sown at the same time with buckacre, with 150 pounds of phosph Much nitrogen is leached through the soil if there is not some growing crop to preserve it. Buckwheat consumes but small amount of nitrogen, while the clover gathers an abundance of this necessary element.-E. S. Keasey,

Potatoes are one of the best crops for a dairy farmer to grow as a cash or market crop. They are easy to raise the common machinery user for other honey growing put up a small hive in completed. When we are buying compone of the largest trees about your home. This plan has been known to out behind unless we plan to pay for succeed a number of times in captur- a large amount of this feed from the money received from some other source than the dairy. Burdock, that great pest, is a hard safe business, but I don't believe it is spraying the cows will discourage the third none provided the grasses about to be used.

Will never sell for so much again, and is seen by the greater attention which thing to kill, but salt will do the job.

Strips of cloth tied on the branches of trees near the poultry yard will do the poultry and the increase in value of thing and sacrifice all other profitable. poultry and the increase in value of before it goes to seed and drop a hand- thing and sacrifice all other profitable possibilities of our farms.

We sometimes lose our seeding in

the oats or wheat and rather than re-

Dairying is a good.

JUNE WORKING NOTES

This is leaf blight. Bordeaux

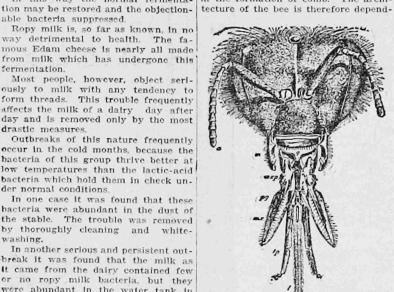
bugs busy till the vines get a start. Don't neglect to plant sweet corn at mixed with other feeding stuffs.

Milk is plentiful now and the hens usual numbers of bacteria to the milk. Fruit in nice, clean boxes will bring a

a well-developed bitterness while others remain normal, it may be assumed that the source of infection is the ud-

stable gradually become inoculated in the hive that the honey from each

Wax is a product of the bees, and day the animals obtained from In this way the normal fermenta- in the formation of comb. The archi- is more than was usually drank by



/a, Antenna or feeler; 1, Tongue; b, Spoon of the tongue

HEAD OF A HONEY BEE MANY TIMES MAGNIFIED.

om or strained through the wire produced by the bee itself, and is distinctly different from the structures nor is Massachusetts going into the R. B. Rushing, ation with the water.

The trouble was removed by thor-earth or wood or some material ready officials estimate good profits from the oughly scalding all the utensils, dis-infecting the floor with a 5 per cent sulphuric acid solution and destroy-ing the organisms in the ice water by in the tree, clover, etc -are dependent upon this: An acre of good timber at forty ance should not be conducted with tre- will preserve the covering. proportion of one part to 1,000 parts them for pollination, and without their years is worth \$300. The state has

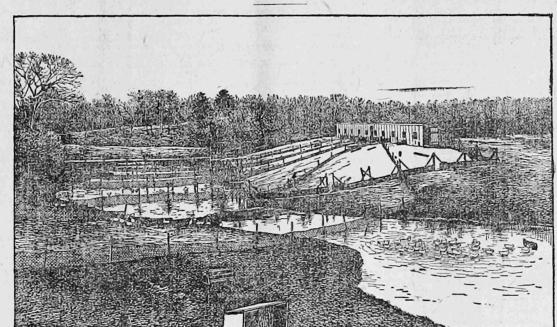


a stairway of 860 steps and infected field is not only costly, but im-

BY J. W. ORIFFIN. WARSAW, KY. fill the notches in corner and brac

First cut notches for the brace in the osts, then set corner or end post good

A SPLENDIDLY ARRANGED BREEDING HOUSE FOR DUCKS



The above shows a duck house with wire-separated water runs. This is an admirable plan for farmers who have running water on their farms.

tion of 100 pounds of this feed per THE PEAR ORCHARD

them when fed cured fodders alone.

While no digestion experiments were made with any of the cacti other than prickly pear, the digestion coefficients of the latter could probably be safely car trees.

Setting it is best to cultivate the pear orchard in vegetables of some sort, but never in wheat or rye. The vegetables of some sort, but never in wheat or rye. The vegetables of the price of paper will not be advanced to a point where its use would necessarily be restricted.

The government has done many great things for the benefit of the prickly pear, the digestion could probably be safely pear trees.

The digestion could probably be safely pear trees.

When the pear tree makes a fine farmers, but if the cornstalk experiments prove successful this achieve-

other characteristics are similar.

Animals scour quite badly when fed years in that crop.

The first crop of clover may be are needed to supply the proper amount of of proteids; for these reamount of the protein the proper is the protein tion for a 1000 nound mileh cow While the pear orchard is in cloves of fifty pounds of prickly pear, ten it is beneficial to hoe or grub around LITTLE HELPS FOR FARMER'S WIFE bounds of wheat bran and ten pounds each tree in the spring and keep the of alfalfa would furnish about the cor- soil loose around it; rect theoretical amount of nutrients, many insects and also keeps them from in which the ratio of proteids to car- nesting there.

bohydrates would be 1 to 5.46. LOOKING INTO THE FUTURE

F. W. Fane, the state forester, is inviting the people of Massachusetts to healthy. turn over their waste lands to the state to be reforested. The owner is given the privilege of buying back the the trunks. The pear, however, needs land in ten years for the actual cost of the improvements put on by the state plus a low rate of interest. The state eral years, unless there is a tendency sets out seedlings on these tracts of to grow too much in height at the swamp or other waste places and care- expense of the width, fully cultivates and protects them un-

til they are ten years old of thrift to do something for nothing,

assistance the crops might be much nearly 3,000,000 acres of forests and holders. It is work for the National a refrigerator or meats or poultry reduced .-- Herbert Osborn, Professor of waste land, leaving out the parks, and grange. it is figured that If these 3.000,000 acres forty years from now are cov

> comething around \$900,000,000. Of course much of the timber will nuch all the timber in adjoining states soil fertility wherever he goes. It is unless they wake up-will be gone. good gospel and cannot be too widely At any rate the people of Massachu-etts are beginning to sit up and take setts are beginning to st. any sound farmer than an unsuccessful clark in round. ike a dollar-and the reforestation a

SOME POULTRY YARD HELPS

scheme seems to be pretty firmly

grounded.

Save the earliest and best pullets for winter layers. If one or two are not so thrifty as the rest, get rid of them. Keep your chicks tame. It is a nui-

Each spring and fall wash down the

bout half and half. This will destroy insects and keep the bark smooth and Keep down all suckers from around

Low heads are more desirable, However, when pruning is necessary it ameled bath tubs, marble wash bowls But it isn't the New England idea should be done to conform to the habits and natural shape of the tree,-

RAIL FENCE PHILOSOPHY

Among the promising forms of farm-ers' organizations is insurance. There shaking well. This will prevent the is no reason why life and fire insur- dust from rising and scattering and ing butter.-J. H. Vincent. mendous benefit and profit to share-

tain good roads does not deserve the which they are brought from market. ered with nice trees they will be worth benefits of rural route postal delivery. If a railroad train kills a man or his horses or cows the company has to have some tangible value after five pay the damages. Owners of automoyears' growth from the seedling, but the big results will come after pretty

James J. Hill continues to preach James J. Hill continues to preach

spread.

downright slavery.

to the cities rises above the drudgery

SPRAYING APPLE TREES To be the point of the leaves and vines as you lead to the leaves and vines and by the ancients and put upon the left hand. From a supposed contribution of the leaves and vines as you lead. The point contribution in the plant close to the poultry yard do not worry if the chicks as you lead. The point contribution in the plant close to the poultry yard do not worry if the chicks as you lead. The poultry were in full blossom, suited to the needs of the calf. We be in it that he would have lost had he once.

If there is a meadow adjoining the poultry yard do not worry if the chicks at the results. The larves stayed green one of the largest trees about your locks as you lead. The poultry hand of the leaves and vines are fond of the leaves and vines and will not allow the roots to send on at allow of the work can be done to took me about two hours. I sprayed them inside and out and was surprised to the poultry yard do not worry if the chicks at the results. The larves stayed green one of the largest trees about your hours are fond of the leaves and vines and london purple. It took me about two hours. I sprayed them inside and out and was surprised grow good calves will find it to his advantage to buy a good cream separator one of the largest trees about your hours. The larves stayed green and use it intelligently.

Cull out the young roosters for broil-Bessie L. Putnam.

some alarmists would have us believe. If, however, the government succeeds The first three or four years after setting it is best to cultivate the pear stalks, the wood will last longer and

amily, since their composition and be growth the fifth year the orchard can be put in clover and left two or three years in that crop,

when the pear tree makes a line growth the fifth year the orchard can be put in clover and left two or three years in that crop,

to rot on the ground to enrich the soil. in his own field,

Never wash tan or brown hose in hot water or in water that has been used for other clothes. Use tepid warunks and larger limbs of the trees ter and white soap, washing carefully with a solution of soft soap and water, about half and half. This will destroy hang at once to dry, and they will re-

> quickly and to better purpose than by leaving the oven door open. A vessel of boiling vinegar kept on the stove when cooking cabbage, onions or other vegetables will counteract the odor, which is often offensive when the house is closed.

tain their colors.

or marble tables. Rinse well with strong soap suds to destroy the odor of the kerosene. Upholstered furniture should never be beaten directly upon the covering. Lay heavy cloths on top and then beat,

Kerosene is excellent to clean en-

Never put hot food of any kind into ithout a plate under them. The community that will not main- leave meats wrapped in the papers in

-Aunt Emily.

SEPARATORS AND CALVES

There is no doubt but that calves do

exceedingly well on separated milk.

The calf that sucks the cow will do

well until weaning time comes, but the Young man, better a successful arated milk will flourish the whole year For the sake of a few more pounds of butter the calf is often Here is something for every farm starved to a gaunty, unsightly little boy to consider: It is a fact that only dwarf and never comes to maturity ne out of every 300 farm boys who go and is always poor property to its of clerkship with its poor pay and milk from the separator you will have a big, strong calf in such a condition that will give the best results for the extra care and labor, the same as other stock kept in a thriving condition. sance to have to use a shotgun to

About the only use most of us make
catch a chicken. Incubator chicks of our sprayers is to kill potato bugs sinew for the calf. We are looking About the only use most of us make Sweet skimmed milk makes bone and have this advantage, they are accus-tomed to being handled and are pever writer was of the opinion that the maturity and there are cheaper foods rendered unmanageable through fright. spraying of trees was too much trouble, than 25-cent butter fat upon which to Chicks, as surely as people, are I have twenty-five apple trees, many raise calves. That is, buy centrifucreatures of habit. Feed always in the of which are old. In the nine years I gal cream separators, if you do not same place and as nearly as possible at the same time, and they will rarely few apples that were not wormy. A the milk as soon as run through the empty hive and placed it 40 feet high at the same time, and they will rarely few apples that were not wormy. A large percentage always dropped off and rotted. Last year I sprayed the animal heat and in the condition just hive and he soon had a hive of bees.

The Missouri state legislature appropriates \$4,000 biennially for the state poultry shows and for promoting the interests of the hen, and the result the barnyard products in that state.